

REMARKS

The Office Action of December 22, 2010, has been carefully studied. Claim 1-8 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

Rejections under 35 U.S.C. 112

Claim 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that claim 1 is indefinite for reciting the limitation "the boronic acid" in the final two lines of claim 1 because there is improper antecedent basis.

This rejection is respectfully traversed.

Claim 1 has been amended to make it clear that the boronic acid in the second part of the claim is the same boronic acid that was added to the reaction.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

This rejection is respectfully traversed.

The specification makes many references to adding boronic acid to subjecting a carbohydrate scaffold intramolecular acyl migration wherein a boronic acid is added to control the isomers produced by the reaction.

Paragraphs [0013, 0017, 0034 and 0039] describe the effect boronic acid has on this type of reaction, i.e., the boronic acid is a selector for the desired isomer.

Particularly, paragraph [0027] states, “Boronic acid can be added to the mixture as a selector, since it is well known that boronic acids form five-membered cyclic esters preferably with 1, 2-cis diols in sugar. Adding the boronic acid shifted the equilibrium in favor of one isomer over the others.”

Paragraph [0031] states, “...The present inventors envisioned that only one isomer of the nine, namely, 3,4-dibenzoyl-chiro-inositol, which carries two cis-vicinal diols, would have a higher binding affinity for two boronic acids, thus stopping further migration...”

It is clear form the description in the specification that there is ample support from specification for the limitation that the boronic acid shifts the equilibrium of the reaction to the desired isomer.

Art Rejections

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Petasis et al., US 6,927,294.

This rejection is respectfully traversed.

Claim 1 has been amended to make clear that the claimed process is for making a dynamic library containing only at least one desired isomer. Adding boronic acid to the reaction mixture controls the isomers produced by the reaction. This is discussed at length in the specification, particularly at paragraphs [0013, 0017, 0034 and 0039]. It is clear that the boronic acid is not a reactant, but is a compound that reacts with one or two isomers of the reactant to stop further migration and shift the reaction to the formation of the desired isomers (see paragraph [0031]). This reaction shift is described in more detail in paragraph [0032].

In the passages from Petasis the Examiner quoted, it is clear that the boronic acid in Petasis is a protecting group. The presently claimed method provides a method for controlling which isomers are produced by adding a boronic acid to the reaction mixture. Petasis, on the other hand, teaches that the boronic acid is a protecting group for the carbohydrate moiety prior to tosylation. There is absolutely nothing in Petasis that even suggests that the boronic acid can shift the equilibrium of the reaction to favor a particular isomer.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourne et al., *Journal of Chromatography A, Volume 11(2):253-257*, in view of Petasis.

This rejection is respectfully traversed.

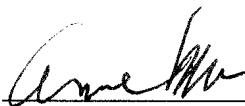
The Examiner concedes that Bourne does not teach acyl migration of the boronic acid compound. However, Petasis adds nothing to Bourne, as Petasis adds an organic boron compound as a protecting group for the carbohydrate derivative. This has nothing at all to do with shifting the equilibrium to favor one over several isomers.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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